

FIGURE 1

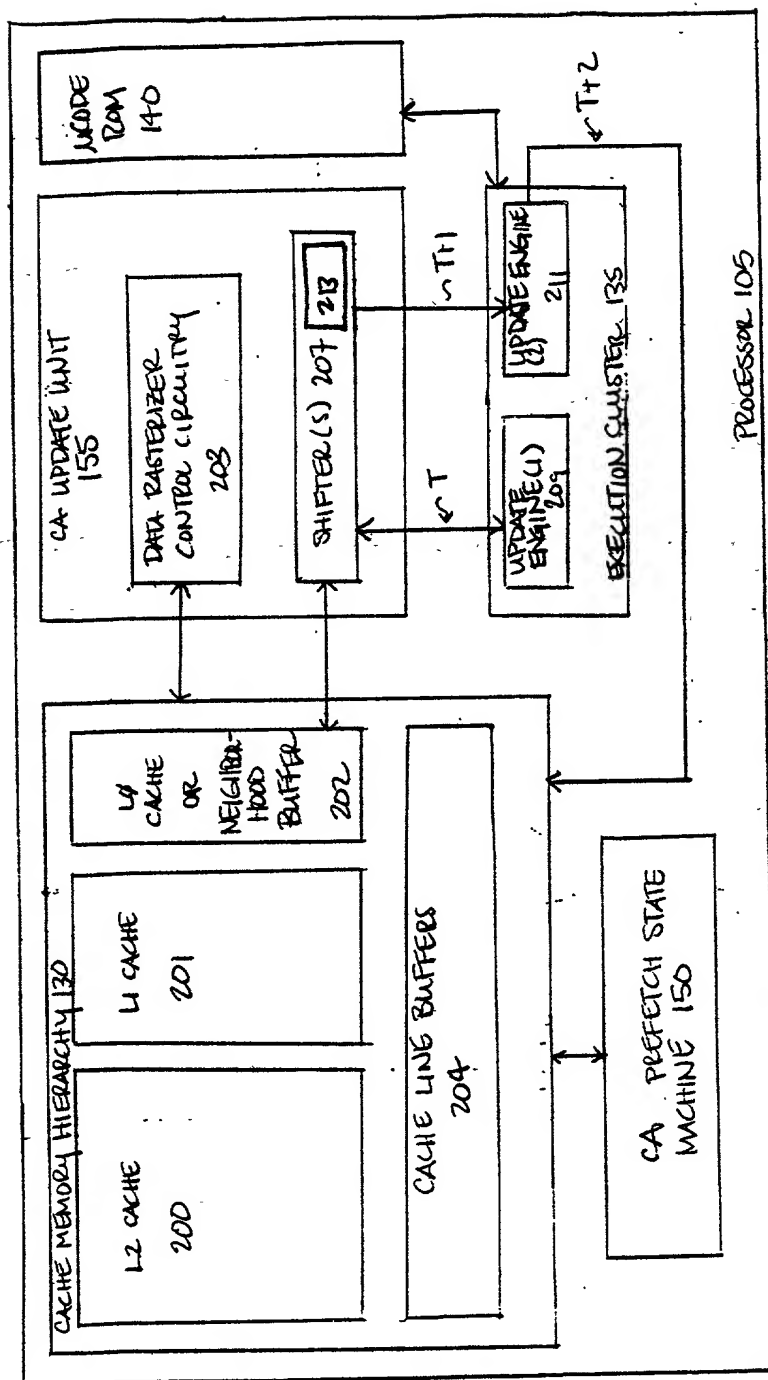


FIGURE 2

```

graph TD
    BEGIN([BEGIN]) --> 305[LOAD CA DATA AT TIME T INTO  
CACHE MEMORY]
    305 --> 310[SHIFT IN RASTERIZED DATA FROM CELLS  
INCLUDING CELL TO BE UPDATED AND ASSOCIATED  
NEIGHBORHOOD CELLS]
    310 --> 315[STORE PREFETCHED DATA IN  
NEIGHBORHOOD BUFFER]
    315 --> 325[SELECT AND PRESENT CELL TO BE UPDATED  
AND NEIGHBORHOOD CELLS TO  
UPDATE ENGINE]
    325 --> 330[UPDATE CELL ACCORDING TO UPDATE RULE  
AND STATE OF NEIGHBORHOOD CELLS]
    330 --> 335[WRITE BACK UPDATED STATE FOR TIME T+1  
OR UPDATE FOR NEXT GENERATION AND  
THEN WRITE BACK]
    335 --> 340{MORE CELLS TO BE  
UPDATED?}
    340 -- Y --> 310
    340 -- N --> END([END])
  
```

FIGURE 3

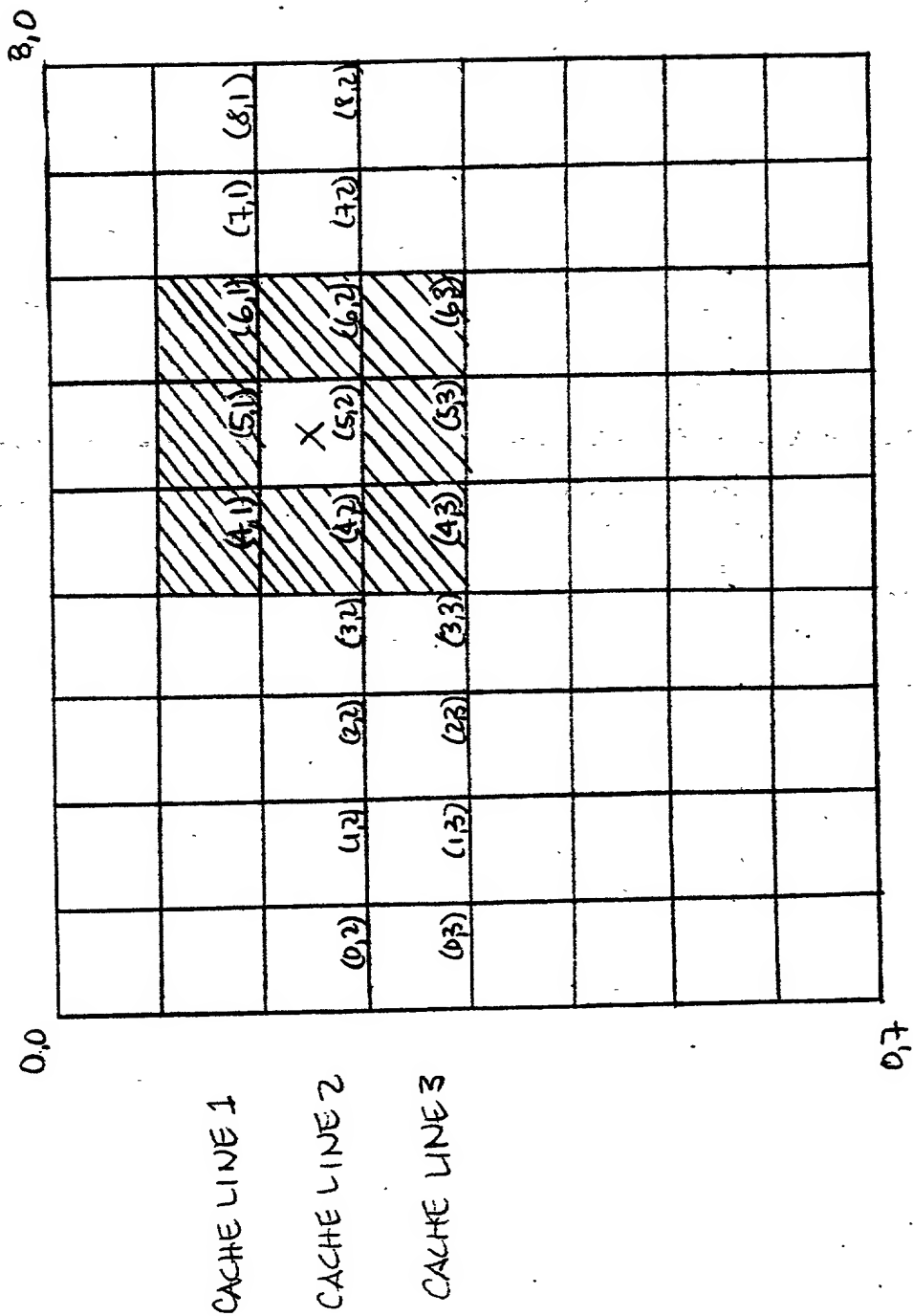


FIGURE 4

[illegible]

Figure 5